

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 11, line 3, with the following rewritten paragraph:

Fig. 1 shows a gene sequence (SEQ ID NO:9) and an amino acid sequence (SEQ ID NO:7) of an H-chain variable region of an antibody recognizing GM1 ganglioside bound amyloid β -protein. CDR represents a complementarity determining region; and a signal sequence is a sequence of a signal portion.

Please replace the paragraph beginning at page 11, line 7, with the following rewritten paragraph:

Fig. 2 is shows a gene sequence (SEQ ID NO:10) and an amino acid sequence (SEQ ID NO: 8) of an L-chain variable region of an antibody recognizing GM1 ganglioside-bound amyloid β -protein. CDR represents a complementarity determining region; and a signal sequence is a sequence of a signal portion.

Please replace the paragraph beginning at page 11, line 16, with the following rewritten paragraph:

Fig. 4 is a graph showing measurement results of the ThT assay in Example 2. In Fig. 4A, ■ [[]] denotes fluorescence when an A β solution was incubated with liposomes; and Δ denotes fluorescence when the A β solution was incubated with fA β . It is shown that the fluorescence

when the incubation was carried out in the presence of liposomes immediately increased without a lag phase and attained equilibrium hyperbolically. No increase in fluorescence was observed at all when the incubation was carried out in the absence of liposomes or fA β (the case shown by (o)). Fig. 4B shows a semilogarithmical plot of the difference: $F(\infty) - F(t)$ versus incubation time (0-24 hrs). $F(t)$ represents the increase in fluorescence as a function of time when A β was incubated with liposomes, and $F(\infty)$ was experimentally determined. Fig. 4C shows electron micrographs of the mixture incubated for 24 hours following addition of fA β (upper micrograph) and the mixture incubated for 96 hours following addition of liposomes (lower micrograph). The bar indicates a length of 100 nm.

Please replace the paragraph beginning at page 13, line 6, with the following rewritten paragraph:

Fig. 6A is a graph showing the results of the ThT assay in which an A β solution, GM1-containing liposomes and the antibody 4396C were concurrently incubated and the formation of amyloid fibrils was examined. The ratio of antibody 4396C molecules to A β molecules is 0.3 : 50 (Δ), 1.3 : 50 (o), and 4 : 50 (\square), respectively. Furthermore, the ratio of antibody 4G8 molecules to A β molecules is 4 : 50 (\diamond). \blacksquare [[]] denotes a result when the incubation was carried out without adding any antibodies. Fig. 6B shows results of immunoelectron micrograph of a mixture of synthetic A β_{1-40} and 4G8, which were concurrently incubated for 24 hours following the addition of the GM1-containing liposomes. The sample was labeled with immunogold-labeled anti-mouse IgG. The bar indicates a length of 100 nm.

Please replace the paragraph beginning at page 41, line 16, with the following rewritten paragraph:

The ThT assay was performed in accordance with a method described in the document (H. Naiki, F. Gejyo, Methods Enzymol. 309, 305 (1999)) using a spectrofluorometer (RF-5300PC; Shimadzu Corporation, Kyoto, Japan). Firstly, the A β solution prepared in 2-1) was incubated with liposomes at an A β concentration of 50 μ M (GM1 : A β = 10 : 1) or with 10 μ g/ml of fA β prepared in 2-3) in PCR tubes (ELT-0.5, Ryocou) at 37°C using Dry Thermo Unit Incubator (DTU-1B, TIETECH Co. Ltd., Koshigaya, Japan). Immediately before measurement, 5 μ l of incubation mixture was taken from each tube and mixed in 995 μ l of 50 mM glycine—NaOH buffer (pH 8.5) that contains 5 μ M of ThT. Then, optimal fluorescence of amyloid fibrils (excitation wavelength: 450 nm and emission wavelengths: 490 nm) was measured. Fig. 4 is a graph showing the measurement results. In Fig. 4A, ■ [[]] denotes fluorescence when the A β solution was incubated with liposomes; and Δ denotes fluorescence when the A β solution was incubated with fA β . It is shown that the fluorescence when the incubation was carried out in the presence of liposomes immediately increased without a lag phase and attained equilibrium hyperbolically.

Please replace the paragraph beginning at page 45, line 20, with the following rewritten paragraph:

An A β solution and GM1-containing liposomes prepared in Example 2 and the antibody 4396C were concurrently incubated, and the formation of amyloid fibrils was examined by the

ThT assay. As control for comparative, incubation was carried out by using an antibody 4G8 instead of the antibody 4396C. Fig. 6A shows the results. The ratio of antibody 4396C molecules to A β molecules is 0.3 : 50 (Δ), 1.3 : 50 (\circ), and 4 : 50 (\square), respectively. Furthermore, the ratio of antibody 4G8 molecules to A β molecules is 4 : 50 (\diamond). ■ [[]] denotes a result when the incubation was carried out without adding any antibodies. As shown in Fig. 6A, the antibody 4396C inhibits the increase in fluorescence of ThT in a dose-dependent manner. On the contrary, the antibody 4G8, i.e., a different anti-A β antibody, did not inhibit the increase in fluorescence at all.